Association of Transportation Safety Information Professionals

2002 Traffic Records Best Practice
Application Form

Part 1 - Project Summary

PROJECT TITLE:_ Crash Analysis Tools and Training for Local Users

APPLICATION ORGANIZATION:
**Lead Agencies: Iowa Dept. of Transportation and
Southeast Michigan Council of
Government (SEMCOG)**

Nominating Person: Joyce Emery & Tom Bruff

**Title: Joyce is a Program Manager; Tom is an
Engineering Coordinator**

**Project Managers : Joyce Emery/Robert L. Schultz,
Iowa DOT
Office of Traffic and Safety
800 Lincoln Way, Ames, IA 50010**

**Tom Bruff, SEMCOG
Southeast Michigan Council of
 Governments
535 Griswold Street, Suite 300
Detroit, Michigan 48226**

**Joyce: Telephone: 515-239-1016
FAX: 515-239-1891
Email: jemerydot@yahoo.com**

**Tom: Telephone: 313-324-3340
FAX: 313-961-4869
Email: bruff@semcog.org**

Introduction: This is a joint submittal by agencies in two states that have no
contractual or formal agreement between them. After years of evolving programs
separately, these two agencies have found common ground for information sharing and
collaboration regarding tools and training for their local constituents.

These agencies feel that they exemplify many "best practices" in how they meet their
goals in the tools and training area. However, the overall "best practice" that they hope
to showcase is the practice of partnering with each other.

Identify to which national agenda goal(s) this applies:

Goal V: This is the single most relevant goal. However, the Iowa training has to date been less sophisticated in methodology and more basic in content than is intended by this goal. Iowa's training program has excellent outreach and service delivery but needs to expand and strengthen program content. That is where our partnership with SEMCOG comes in. They have a very good model manual with comprehensive content that ties everything together for the user. To enhance this progress, SEMCOG wants to improve the delivery of training and provide support services in both software tools and analytic methods.

Goal I: Both agencies feel that providing "analysis tools and training" can enhance an appreciation of the value of highway safety information systems among local agency members. A portion of Iowa's training is specifically directed toward this goal. However, even indirectly, it speaks volumes to local leaders about the significance of highway safety information when they observe the effort made in enabling them to utilize it.

Not all local agency staff members or leaders are going to become "hand-on" analysts, no matter how good the software and the training. However, we love to have these persons in class too. When a police chief attends along with police department staff, that person's presence reinforces the message of the value of the training. Furthermore, it exposes the chief to the trainer's many references to the value of crash data, the importance of accurate and complete reporting, and of uses of the information both within police agencies and by other safety disciplines.

Was this item to be addressed according to your traffic records committee's strategic plan? If yes, which item.

The most current version of Iowa's Statewide Traffic Records Advisory Committee (STRAC) was approved by the membership on November 29, 2001. Roman numeral eight in the topics list is "Data Analysis, Including Training Issues." Under that heading is the goal: "Expand analysis training and develop programs, instructional materials, and workshops to meet changing user needs." Iowa continues to work on new instructional materials using SEMCOG materials as a model.

PROJECT COST:

Project cost is not particularly relevant to this submittal. In both the Iowa DOT and SEMCOG, the development of analysis tools and the provision of assistance to those using them have been core business processes for a very long time. There have been transitions, there have been projects embedded within, but these are not at the heart of our submittal, as will become more evident further on.

Some cost information is provided by Iowa:

(Iowa only)

> **Planned: $ 30,000 per year**
> **Actual: $ 30,000 per year**

The scope of this training is limited to the program of the Iowa DOT Office of Traffic and Safety for the software developed and maintained by that office and its proper use in analysis of safety data.

Project benefits: (Both Tangible And Intangible) FOR BOTH AGENCIES, SEPARATELY AND TOGETHER:

Iowa:

- Circuit Rider model reduces or eliminates time away from the office for overworked local staff. This is particularly crucial for Iowa's small rural police and sheriff's offices.

- Integration of phone and email support mechanisms prior to and following training provide timely service and maintain continuity while minimizing the main office's involvement.

- Training is designed to foster communication and cooperation in use of data among geographically related local agencies, and to emphasize the value of the data to all safety disciplines.

- An efficient contract between the Iowa DOT and the Consultant Trainer is vital to maintain productivity and minimize administrative expense on either side.

SEMCOG:

- Developed a comprehensive manual on how to perform a complete array of analytical work using safety data.

- After developing the model manual for analytical work, the software was then designed to follow the manual. This sequence is noteworthy, for though it is logical, it is difficult to achieve.

- Developed an Intersection File to use in conjunction with their Crash File. Few states have one of these to augment their Roadway Files.

BOTH AGENCIES:

- Met at the 1998 Traffic Records Forum in Minneapolis, visited in Michigan, and have maintained communications ever since.

- Established areas of common interest and common goals with regard to analysis tools and training. Each one is trying to do the same thing for their local constituents.

- Have agreed to share their strengths and experiences with each other, seeing that each had some features that would benefit the other.

- Iowa now has a beginning draft of its own version of the "SEMCOG Manual".

- **SEMCOG has received consultation about the set-up and delivery of training services to its customers, pending the forthcoming release of new software.**

PART 2 - PROJECT DETAIL

NARRATIVE

Please describe the scope of the project and how it relates to the 6 Goals of the 'National Agenda for the improvement of highway safety information systems'.

Background

During the 1970s and 80s, local engineers, technicians, law officers, and others needing reports on local crash history simply ordered a report for the location of interest from the Iowa DOT, and an unwieldy, green-lined, wrap-around printout would arrive some days or weeks later. The computer age had begun, and this was one of highway safety's first applications.

Later, a little DOS program called "PC-ALAS" was created in Turbo-Pascal by a college student assistant (Scott Moreland, who later presented at several Forums and went on to fame and fortune). Let's give the locals' data back to them, we said, with a tool to extract information in a much more usable format than the mainframe system had done. This was sent out on 3 and 1/2 inch floppies to each of the 99 counties. A pilot group grew to nearly 100 users over time.

The advent of analysis being done by local people brought with it a need for training. A few free workshops were offered each year on how to use this software, mostly taught by internal staff and occasionally with a contract consultant.

But as the thing grew, new customers wanted more training. In an attempt to meet these needs, many strategies were attempted. This submittal contains some of the methods that have worked well in this long evolution.

Year-Round Trainer Placed Under Contract

Next, we contracted with a professional software trainer, Robert L. Schultz, who was willing to become expert with our customized analysis software. He could train year-round on an as-needed basis. He also had many ideas for improving the program as a whole, from organization to matters of customer service. Many of the resulting best practices were originally suggestions of Bob Schultz.

By the 1998 forum in Minneapolis, our trainer was being sent to Forums regularly for train-the-trainer purposes. We were then developing a replacement tool for PC-ALAS that we hoped to complete soon and have Bob do the training. There he met folks from SEMCOG, who, as it turned out, were developing new software for a similar purpose. A new partnership quickly formed. Less than two months later, our trainer and our Safety Analysis Engineer visited SEMCOG for two very worthwhile days.

About SEMCOG's Program

Among SEMCOG's best practices is their integration of analysis software with a very excellent manual on the applications and uses of safety data. Benefit/cost

determinations and prediction of countermeasure effectiveness are covered in the manual and built right into the software.

SEMCOG also has an Intersection File (separate from the Roadway File) to use in conjunction with their Crash File, which enables them to do analysis Iowa can only dream of. However, Iowa has taken the first steps towards developing something similar to SEMCOG's Intersection File.

About Iowa's Program

Iowa's best practices in analysis training focus on the "circuit rider" model in which the trainer goes to the customers. The entire thing is driven by customer demand, but procedures are in place to keep the program efficient and affordable. Program features include building interdisciplinary teamwork at the local level, motivation in the value of collecting and using crash data, and building communications for user technical support via email, an electronic newsletter, and phone support.

In the Iowa system, data users are empowered to do for themselves all the analysis they are capable of. For data needs that exceed their ability to generate hands-on, there are numerous options for requesting analysis services. (One of these service options, the Iowa Traffic Safety Data Service, as presented at last year's Forum.)

Sometimes administrative busy-work impedes program progress or even kills ideas before they get off the ground. One of Iowa's best practices is the model contract used for the contract circuit-rider trainer. As established by this contract, the program takes very little administrative time from either the DOT manager or from the contract trainer, so they can spend their time more productively. Our "slick tricks" will be alluded to briefly in the presentation at the 2002 Forum, and we will share copies of the contract with attendees who request it.

In conclusion:

SEMCOG is now planning local user training for its analysis system heavily using Iowa's experience. Iowa is developing a broad safety data applications manual based on the model manual of SEMCOG.

Very little of the TECHNOLOGY of traffic records is the same in these two states. Yet, the partnership on the analysis/training side can flourish due to similar goals regarding the use of safety data.

Desired Outcomes:

The desired outcomes of the SEMCOG/Iowa DOT partnership for tools and training is as follows:

- Maintain communications between these two agencies as an informal source of advice and assistance.
- For Iowa, continue to fill in the gaps of content and organization as exemplified by the SEMCOG Manual.
- Iowa has trained over 400 persons statewide in the use of its custom crash analysis software since the software was released in fall of 1999, a fourfold increase over usage of the previous software, PC-ALAS. All of these persons voluntarily requested the training and the software.

- For SEMCOG, develop enhanced training mechanisms and exemplified by Iowa's program.

Describe the major process steps that you went through to do this project:

1. Members of each agency met in Minneapolis in 1998.

2. Later that same summer, two staff members from Iowa were hosted by SEMCOG for two days.

3. Phone and other correspondence continued as months and years passed.

4. Work on the desired outcomes made slow progress, but progress nonetheless.

5. Each agency is pleased with the help it has received from the other.

Did the project successfully achieve the benefits identified earlier?

Yes   X
No   _____

Describe how the project actually met or did not meet the benefits:

1. Iowa has a draft manual underway.

2. SEMCOG is planning training.

3. Both agencies have adapted the elements it could use from the other.

4. The lines of communication are open for further collaboration.

Submit via mail to:

Jan L. Meyers
Washington State Department of Transportation
Transportation Data Office
P. O. Box 47380
Olympia, WA 98504-7380